Section A

# West Desert Basin

**Utah State Water Plan**

## ACRONYMS, ABBREVIATIONS AND DEFINITIONS

### A.1 ACRONYMS AND ABBREVIATIONS

Many names, titles, programs, organizations, legislative acts, measurements and activities are abbreviated to reduce the volume of words and to simplify communications. A few of the abbreviations and acronyms used in the West Desert Basin Plan are listed below.

#### A.1.1 State and Local Agencies and Organizations

| | |
|---|---|
| CEM | Division of Comprehensive Emergency Management |
| CUWCD | Central Utah Water Conservancy District |
| DFFSL | Division of Forestry, Fire and State Lands |
| DWQ | Division of Water Quality |
| DWRe | Division of Water Resources |
| DWRi | Division of Water Rights |
| DPR | Division of Parks and Recreation |
| DDW | Division of Drinking Water |
| DNR | Department of Natural Resources |
| DEQ | Department of Environmental Quality |
| GOPB | Governor's Office of Planning and Budget |
| MCD | Multi-County Planning District |
| SDCO | State Disaster Coordinating Office |
| SHMT | State Hazard Mitigation Team |
| UWQB | Utah Water Quality Board |

#### A.1.2 Federal Agencies

| | |
|---|---|
| BLM | Bureau of Land Management |
| BR | Bureau of Reclamation |
| COE(Corps) | Corps of Engineers |
| EPA | Environmental Protection Agency |
| FSA | Farm Service Agency |
| FEMA | Federal Emergency Management Agency |
| FERC | Federal Energy Regulatory Commission |
| FWS(USFWS) | Fish and Wildlife Service |
| GS(USGS) | Geological Survey |
| NPS | National Parks Service |
| NRCS | Natural Resources Conservation Service |
| USDA | United States Department of Agriculture |

### A.1.3 Programs/Acts

| | |
|---|---|
| ACP | Agricultural Conservation Program |
| CERCLA | Comprehensive Environmental Response and Comprehensive Liability Act |
| CFR | Code of Federal Regulations |
| CRP | Conservation Reserve Program |
| CWA | Clean Water Act |
| DWSPR | Drinking Water Source Protection Rule |
| ESA | Endangered Species Act |
| ECP | Emergency Conservation Program |
| EQIP | Environmental Quality Incentives Program |
| LWCF | Land and Water Conservation Fund |
| NAWQA | National Water Quality Assessment |
| NFIP | National Flood Insurance Program |
| NPDWR | National Primary Drinking Water Regulations |
| NPDES | National Pollution Discharge Elimination System |
| RPDWS | Rules for Public Drinking Water Systems |
| SCORP | State Comprehensive Outdoor Recreation Plan |
| SDWA | Safe Drinking Water Act |
| UPDES | Utah Pollution Discharge Elimination System |
| USDWA | Utah Safe Drinking Water Act |
| UWPCA | Utah Water Pollution Control Act |
| UWQA | Utah Water Quality Act |
| UWQB | Utah Water Quality Board |

### A.1.4 Measurements

| | |
|---|---|
| ac-ft | Acre-feet |
| ac-ft/yr | Acre-feet per year |
| cfs | Cubic Feet Per Second |
| F° | Degrees Fahrenheit |
| gpcd | Gallons Per Capita Day |
| gpm | Gallons Per Minute |
| Kgal | 1000 gallons |
| MCL | Maximum Contaminant Level |
| µmhos/cm | Micro mhos (unit of conductivity) per centimeter |
| mgd | Million Gallons Per Day |
| mg/l | Milligrams Per Liter |
| mW | Megawatt |
| PMP | Probable Maximum Precipitation |
| SMCL | Secondary Maximum Contaminant Level |
| TDS | Total Dissolved Solids |

### A.1.5 Miscellaneous

| | |
|---|---|
| CWS | Community Water Systems |
| EAP | Emergency Action Plan |
| EOP | Emergency Operations Plan |
| FIRE | Finance, Insurance and Real Estate |

| | |
|---|---|
| GSL | Great Salt Lake |
| LDS Church | Church of Jesus Christ of Latter-day Saints |
| M&I | Municipal and Industrial |
| NCWS | Non-Community Water Systems |
| NTNCWS | Non-Transient Non-Community Water Systems |
| ORV | Off-Road Vehicle |
| PWS | Public Water Systems |
| RC&D | Resource Conservation and Development |
| RMP | Resource Management Plan |
| RPA | Reasonable and Prudent Alternative |
| TCPU | Transportation, Communications and Public Utilities |
| TNCWS | Transient Non-Community Water Systems. |
| UPED | Utah Process of Economic and Demographics |
| WET | Water Education for Teachers |
| WWTP | Wastewater Treatment Plant |

## A.2 WATER RESOURCE DEFINITIONS

Many terms used in the water business have different meanings in different contexts and are sometimes confusing. Some words are used interchangeably. A few commonly used water terms are defined for use in this document.

### A.2.1 Water Use Terms

Water is often said to be *used* when it is diverted, withdrawn, depleted, or consumed. But it is also *used* in place for such things as fish and wildlife habitat, recreation and hydropower production.

*Commercial Use* - Uses normally associated with small business operations which may include drinking water, food preparation, personal sanitation, facility cleaning/maintenance and irrigation of landscapes.

*Consumptive Use* - Consumption of water for residential, commercial, institutional, industrial, agricultural, power generation and recreational purposes. Naturally occurring vegetation and wildlife also consumptively use water. Water consumed is not available for other uses within the system.

*Depletion* - Net loss of water through consumption, export and other uses to a given area, river system or basin. The terms *consumptive use* and *depletion*, often used interchangeably, are not always the same.

*Diversion/Withdrawal* - Water diverted from supply sources such as streams, lakes, reservoirs, springs or wells for a variety of uses, including cropland irrigation and residential, commercial, institutional and industrial purposes. The terms *diversion* and *withdrawal* are often used interchangeably.

Evapotranspiration - A combination of Evaporation, the transfer of water from the liquid to the vapor state, and Transpiration, the process by which plants remove moisture from the soil and release it to the air as vapor.

*Industrial Use* - Use associated with the manufacturing or assembly of products which may include the same basic uses as commercial business. The volume of water used by industrial businesses, however, can be considerably greater than water use by commercial businesses.

*Institutional Use* - Uses normally associated with general operation of various public agencies and institutions, including drinking water; personal sanitation; facility cleaning and maintenance; and irrigation of parks, cemeteries, playgrounds, recreational areas and other facilities.

*Irrigation Use* - Water diverted and applied to cropland. Residential lawn and garden uses are not included.

*Municipal Use* - This term is commonly used to include residential, commercial and institutional uses. It is sometimes used interchangeably with the term *public water use*.

*Municipal and Industrial (M&I) Use* - This term is used to include residential, commercial, institutional and industrial uses.

*Private-Domestic Use* - Includes water from private wells or springs for use in individual homes, usually in rural areas not accessible to public water supply systems.

*Transient Noncommunity Water System (TNCWS)* - A noncommunity public water system that does not serve 25 of the same nonresidential persons per day for more than six months per year. Examples of such systems are those serving a campground, RV park, diner or convenience store where the permanent nonresidential staff number less than 25, but the number of people served exceeds 25.

*Residential Use* - Water used for residential cooking; drinking; washing clothes; miscellaneous cleaning; personal grooming and sanitation; irrigation of lawns, gardens, and landscapes; and washing automobiles, driveways and other outside facilities.

### A.2.2 Water Supply Terms

Water is supplied by a variety of systems for many uses. Most water supply systems are owned by an irrigation company or a municipality, but in some cases the owner/operator is a private company or a state or federal agency. Thus, a public water supply may be either publicly or privately owned. Systems may also supply treated or untreated water.

*Municipal and Industrial (M&I) Water Supply* - A supply that provides culinary/secondary water for residential, commercial, institutional or industrial uses.

*Public Water System (PWS)* - A system providing water for human consumption and other domestic uses, which has at least 15 service connections or serves an average of at least 25 individuals daily at least 60 days out of the year and includes collection, treatment, storage or distribution facilities under the control of the operator and is used primarily in connection with the system, or collection, pretreatment or storage facilities used primarily in connection with the system but not under his control (see 19-4-102 of the Utah Code Annotated). All public water systems are further categorized into three different types: Community (CWS), non-transient noncommunity (NTNCWS) and transient noncommunity (TNCWS) areas.

*Secondary/Non-Potable Water Supply* - Pressurized or open-ditch water supplies of untreated water for irrigation of privately or publicly owned lawns, gardens, parks, cemeteries, golf courses and other open areas. These are sometimes called dual water systems.

*Noncommunity Water System (NCWS)* - A public water system that is not a community water system. There are two types of NCWSs: Transient and non-transient.

*Non-Transient Noncommunity Water System (NTNCWS)* - A public water system regularly serving at least 25 of the same nonresidential persons per day for more than six months per year. Examples of such systems are those serving the same individuals (industrial workers, school children, church members) by means of a separate system.

### A.2.3 Groundwater Terms

*Aquifer* - A saturated body of subsurface rock or soil which will yield water to wells or springs.

*Groundwater* - Water which is contained in the saturated portions of soil or rock beneath the land surface. Excludes soil moisture which refers to water held by capillary action in the upper unsaturated zones of soil or rock.

*Phreatophyte* - A plant species that extends its roots to the saturated zone under shallow water table conditions and transpires groundwater. These plants are high water users and include such species as tamarisk, greasewood, willows and cattails.

*Recharge* - Water added to the groundwater reservoir, or the process of adding water to the groundwater reservoir.

*Recoverable Reserves* - The amount of water reasonably recoverable from the groundwater reservoir with existing technology.

*Safe Yield* - The amount of water withdrawable from an aquifer on a long-term basis without serious quality, environmental or social consequences, or without depletion of the aquifer's groundwater.

*Total Water in Storage* - A volume of water derived by estimating the total volume of saturated aquifer in intergranular space containing water (total volume multiplied by porosity).

### A.2.4 Other Water Terms

The following water terms have special significance in the water industry:

*Call* - The ability to order a quantity or flow of water at a given time and for a given period of time from a water supplier.

*Carriage Water* - The water used is a sanitary waste transport system of toilets, sewers, etc. The water need not be of drinking water quality.

*Drinking Water* - Water used for a potable/culinary supply.

*Export Water* - A man-made diversion of water from a river system or basin other than by the natural outflow of streams, rivers and groundwater. This is sometimes called a *transbasin diversion*.

*Instream Flow* - Water flow maintained in a stream for the preservation and propagation of wildlife or aquatic habitat and for aesthetic values.

*Non-Point Source Pollution* - Pollution discharged to lakes and streams over a wide land area, not from one specific location. This includes runoff of chemicals and fertilizer from agricultural land, animal waste runoff from feed lots, etc.

*Point Source Pollution* - Pollutants discharged from any identifiable point, including pipes, ditches, channels and containers.

*Potable/Culinary* - Water suitable for drinking or cooking purposes. The terms *culinary* and *potable* are often used interchangeably.

*Reuse* - The reclamation of water processed in a municipal or industrial wastewater treatment system.

*Riparian Areas* - Land areas adjacent to rivers, streams, springs, bogs, lakes and ponds. They are ecosystems composed of plant and animal species highly dependent on water.

*Watershed* - The total area of land above a given point on a waterway that contributes runoff water to the flow at that point; a drainage basin or a major subdivision of a drainage basin.

Wet/*Open Water Areas* - Includes lakes, ponds, reservoirs, streams, mud flats and other wet areas.

*Wetlands* - Areas where vegetation is associated with open water, wet and/or high water table conditions.

*Water Yield* - The runoff from precipitation that reaches water courses and, therefore, may be available for use.